UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,079	03/23/2006	John Wolsey Cook	36-1970	7001

23117 7590 10/17/2007

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER	
OVANDO, PABLO R	
ART UNIT	**PAPER NUMBER**
4131	
MAIL DATE	**DELIVERY MODE**
10/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/573,079	COOK, JOHN WOLSEY	
	Examiner	Art Unit	
	Pablo R. Ovando	4131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 March 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Natra et al, European Patent Application 1009156 (hereinafter referenced as Natra).

As to **claim 1**, Natra teaches a system for providing a telephony service between an exchange and a telephone said system comprising:

an exchange (fig. 1 telephone exchange 38); a telephone (fig. 1 telephone 5a, 5b, 5c); an electrical transmission line connecting said exchange and said telephone (fig. 1 element 31b, fig. 1 element 36, fig. 1 element 21); a node inserted in said electrical transmission line, said node defining a first section of said electrical transmission line extending from said exchange to said node, and a second section of said electrical transmission line extending from said node to said telephone (fig. 1 element 10, fig 1 element 15), said exchange, in use, supplying telephony control signals and voiceband signals on to said first section (paragraph 6);

a power supply arranged in operation to supply electrical power on to said second

section (fig. 1 element 42, paragraph 19 and 22);

a signal converter arranged in operation to convert telephony control signals supplied by said exchange into modified downstream control signals having a frequency that is different to the frequency of said electrical power (paragraph 10, 21);

said node comprising electrical equipment arranged in operation to draw electrical power supplied by said power supply from said second section (fig. 1 element 42a, and paragraph 19 and 22, note that there is an ac voltage and a power supply unit).

As to **claim 2**, Natra teaches that the signal converter is further arranged in operation to convert modified upstream control signals into telephony control signals (paragraph 11).

As to **claim 3**, Natra teaches that the said node further comprises said signal converter (paragraph 9, note that fig. 1 element 10 converts signals).

As to **claim 4**, Natra teaches a subscriber unit inserted in said second section, said subscriber unit defining a network subsection thereof extending from said node to said subscriber unit, and a subscriber subsection thereof extending from said subscriber unit to said telephone, said subscriber unit comprising a further signal converter arranged in operation to convert said modified control signals into telephony control signals as supplied by said exchange (paragraph 21).

As to **claim 5**, Natra teaches that the further signal converter is further arranged in operation to convert telephony control signals supplied by said telephone into modified upstream control signals and wherein said signal converter is further arranged

in operation to convert modified upstream control signals into telephony control signals as supplied by said telephone (paragraph 21).

As to **claim 6**, Natra teaches that the subscriber unit further comprises said power supply (paragraph 21).

As to **claim 9**, Natra teaches that the node further comprises a filter arranged in operation to allow said voiceband signals to pass across said node with minimal attenuation but substantially attenuate all other signals (paragraph 10 and 23 teach a band pass filter, wherein certain signals will be attenuated based on the cut-off frequency).

As to **claim 10**, Natra teaches that the subscriber unit further comprises a filter arranged in operation to allow said voiceband signals to pass across said subscriber unit with minimal attenuation but substantially attenuate all other signals (paragraph 10 and 23 teach a band pass filter, wherein certain signals will be attenuated based on the cut-off frequency).

As to **claim 11,** Natra teaches modified control signals have a frequency that is different to the frequency of said voiceband signals (paragraph 10 and 23).

As to **claim 12,** Natra teaches a ode in a telecommunications network, said node interconnecting first and second sections of an electrical transmission line, said electrical transmission line connecting an exchange in said first section to a telephone in said second section and arranged in operation to carry telephony control signals and voiceband signals supplied on to said first section (fig. 1), said node comprising:

electrical equipment arranged in operation to draw electrical power supplied on to said second section (fig. 1 element 42a, and paragraph 19 and 22, note that there is an ac voltage and a power supply unit);

a signal converter arranged in operation to convert telephony control signals supplied by said exchange into modified downstream control signals having a frequency that is different to the frequency of said electrical power and modified upstream control signals into telephony control signals (fig. 1 element 10, paragraph 21, 23).

As to **claim 13,** Natra teaches a subscriber unit in a telecommunications network, said subscriber unit interconnecting first and second sections of an electrical transmission line, said electrical transmission line connecting an exchange in said first section to a telephone in said second section and arranged in operation to carry telephony control signals and voiceband signals supplied on to said first section (fig. 1), said subscriber unit comprising:

a power supply arranged in operation to supply electrical power on to said second section (fig. 1 element 42a, and paragraph 19 and 22, note that there is an ac voltage and a power supply unit);

a signal converter arranged in operation to convert telephony control signals supplied by said telephone into modified upstream control signals having a frequency that is different to the frequency of said electrical power and modified downstream control signals into telephony control signals (fig. 1 element 10, paragraph 21 and 23).

As to **claim 14**, Natra teaches a method of providing a telephony service between an exchange and a telephone, wherein said exchange and said telephone are

connected by an electrical transmission line having a node inserted therein, said node defining a first section of said electrical transmission line extending from said exchange to said node, and a second section of said electrical transmission line extending from said node to said telephone (fig. 1), said method comprising the steps:

(i) supplying telephony control signals and voiceband signals from said exchange on to said first section (paragraph 21);

(ii) supplying electrical power on to said second section (fig. 1 element 42a, paragraph 19, 22);

(iii) converting telephony control signals supplied by said exchange into modified downstream control signals having a frequency that is different to the frequency of said electrical power (paragraph 21 and 23);

(iv) operating electrical equipment in said node to draw electrical power from said second section (fig. 1 element 42a, and paragraph 19 and 22, note that there is an ac voltage and a power supply unit).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Natra.

As to **claims 7-8**, Natra teaches that the system has a back up battery in case of a power failure. However, Natra does not teach that the system has a bypass unit. Natra teaches that in the prior and in current systems, the power is fed from the exchange (col. 1 lines 24-34). In that configuration the node would necessarily function in a bypass manner since the voltage or signals would not be altered at the node. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the bypass unit for the purpose of having redundancy in the system. Additionally, the bypass unit functions in the same manner as the discussed prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo R. Ovando whose telephone number is 571-272-9752. The examiner can normally be reached on M-F 7:30 am to 5:00pm, EST,Alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.O.

B. J. P.

BRIAN PENDLETON
SUPERVISORY PATENT EXAMINER